3-month summary

- Higher chance of a hot summer compared to normal
- However, temperatures near-average are still the most likely outcome
- Impacts from heatwaves are more likely than usual
- Reduction in the chance of a wet summer compared to normal

3-month likelihood of impact

Temperature

5%	55%	40%
chance the season will be COOL	chance the season will be NEAR AVERAGE	chance the season will be HOT
0.3× ▼ the normal chance	0.9× ▼ the normal chance	2.0× ▲ the normal chance

Precipitation

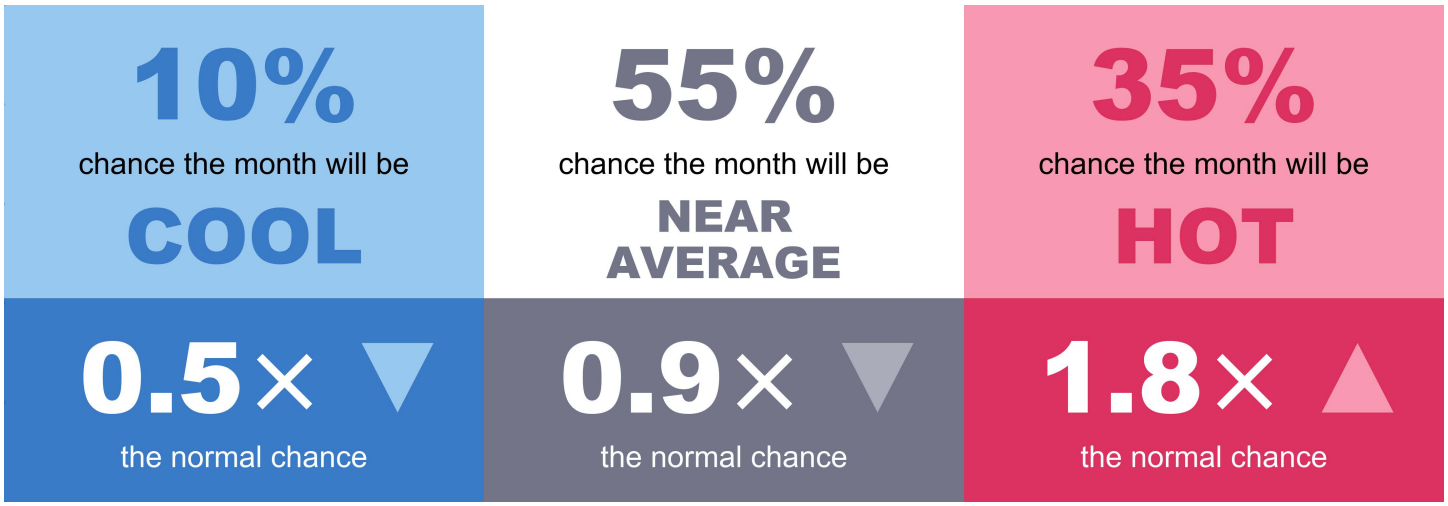
15%	75%	10%
chance the season will be DRY	chance the season will be NEAR AVERAGE	chance the season will be WET
0.8× ▼ the normal chance	1.3× ▲ the normal chance	0.5× ▼ the normal chance

1-month summary

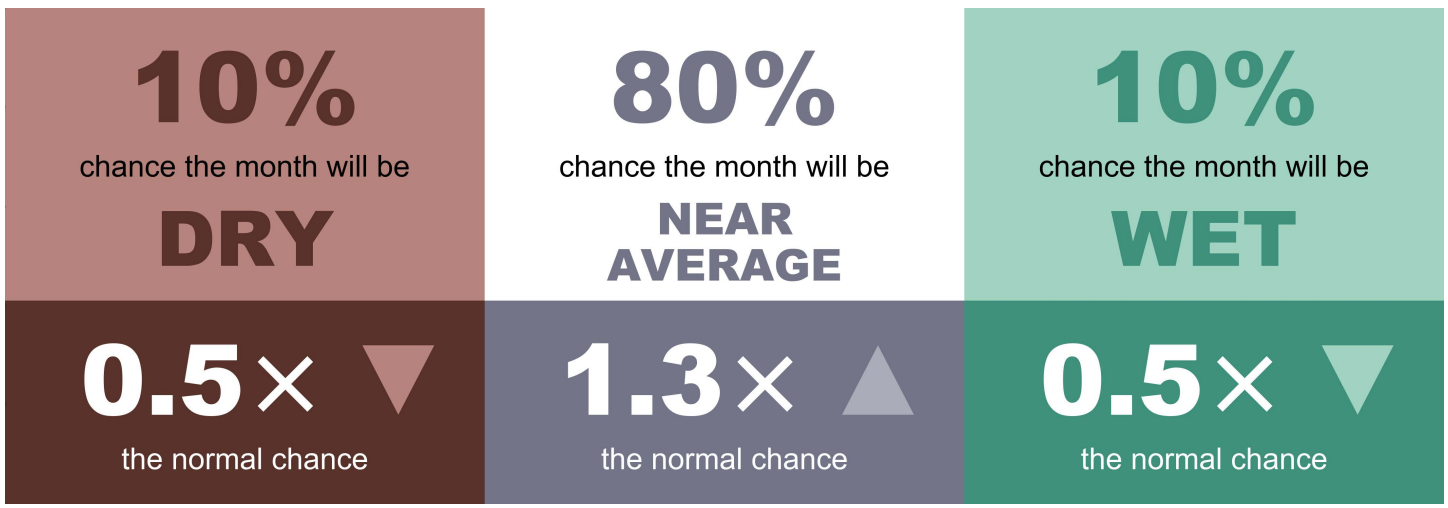
- June is more likely to be hot than cool
- Slightly increased likelihood of near average rainfall
- Chances of a wet or dry June are balanced

1-month likelihood of impact

Temperature



Precipitation



Understanding the Outlook

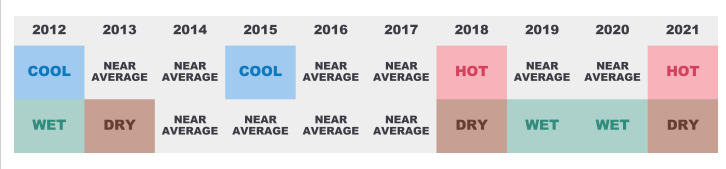
The Outlook uses 3 categories for possible UK temperature and precipitation in the next 1 and 3 months:

COOL, NEAR AVERAGE and HOT for temperature
WET, NEAR AVERAGE and DRY for precipitation

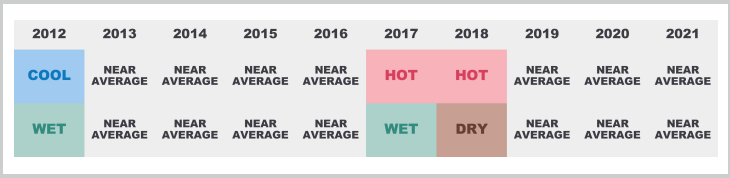
These are linked to observed UK conditions in past years. The NEAR AVERAGE category represents typical conditions for the period and has a normal likelihood of 60%. The higher and lower categories represent more unusual conditions that are more likely to produce impacts. Each has a normal likelihood of 20%.

The Outlook shows how the chances of occurrence of the categories differ from normal, based on knowledge of expected global meteorological patterns. It does not identify which category will actually occur.

Same 3-month period over the last 10 years


2012 2013 2014 2015 2016 2017 2018 2019 2020 2021
COOL NEAR AVERAGE NEAR AVERAGE COOL NEAR AVERAGE NEAR AVERAGE HOT NEAR AVERAGE NEAR AVERAGE HOT
WET DRY NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE DRY WET WET DRY

Same 1-month period over the last 10 years


2012 2013 2014 2015 2016 2017 2018 2019 2020 2021
COOL NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE HOT HOT NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE
WET NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE WET DRY NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE

Outlook in context

Drivers of UK weather for June to August

The impact of global weather patterns on the UK is small through this period. Drivers relevant to the current Outlook are:
• Above average sea surface temperatures around the UK
• The warming of UK climate consistent with wider global warming trends

Long-range weather predictions

The Met Office and other prediction centres around the world routinely produce long-range predictions of conditions in the months ahead. Predictions vary in prevailing conditions but there is, overall, an increased likelihood of high pressure being located near or to the south of the UK, with winds blowing more frequently from the west. Uncertainty in the location of high pressure leads to a more balanced outlook for rainfall with a slight reduction in the likelihood of a wet summer. Despite these uncertainties, long-range models are consistent in predicting an increased likelihood of temperature being above-average overall.

Impact

There is an increase in the likelihood of warmer-than-average conditions. Whilst this doesn't necessarily mean heatwaves will occur, it does increase the likelihood of heatwaves compared to normal. Even with a slight reduction in the chance of a wet period, spells of wetter weather are likely bringing heavy showers or thunderstorms at times.

Outlook compared to normal likelihood

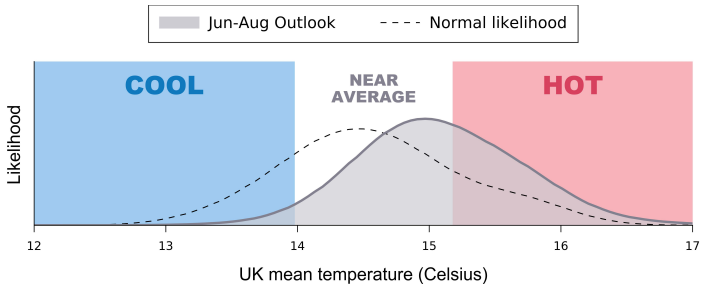
The curves below show the likelihood of the 1- and 3-month average temperature and precipitation taking specific values. In each case:

- The dashed curve shows the normal likelihood based on how often each value has been recorded in past years
- The solid curve shows the current likelihood based on the Outlook for this year

The differences in these curves show how the probabilities for the coming periods differ compared to past years. Where the solid curve (corresponding to this year's Outlook) lies above the dashed curve (normal likelihood), the temperature or precipitation at that point has a greater-than-normal likelihood of occurring. Likewise, wherever it is below the dashed curve, the likelihood of those values is less than normal.

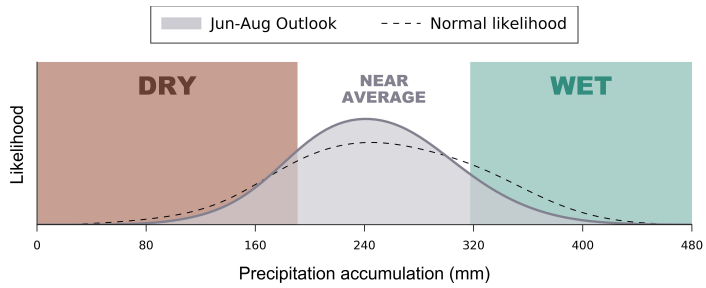
A shift of the solid curve to the left of the dashed curve indicates an increase in the chance of below-average temperature or precipitation. A shift to the right, meanwhile, indicates increased chances of above-average values.

3-month temperature Outlook compared to normal



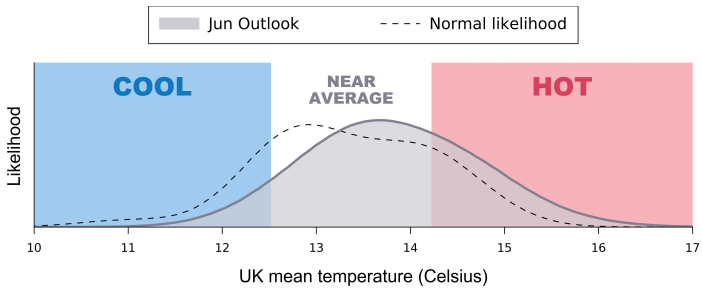
Likelihood leans towards hot conditions

3-month precipitation Outlook compared to normal



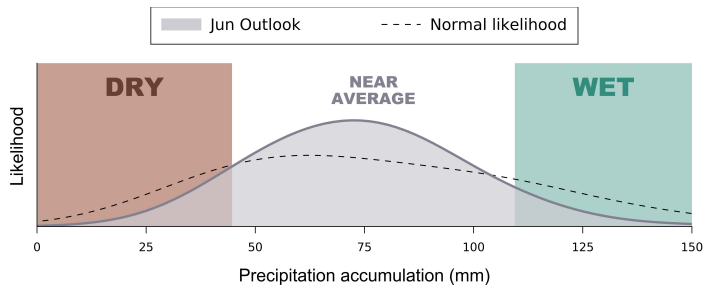
Likelihood leans slightly away from wet conditions

1-month temperature Outlook compared to normal



Likelihood leans moderately towards warm conditions

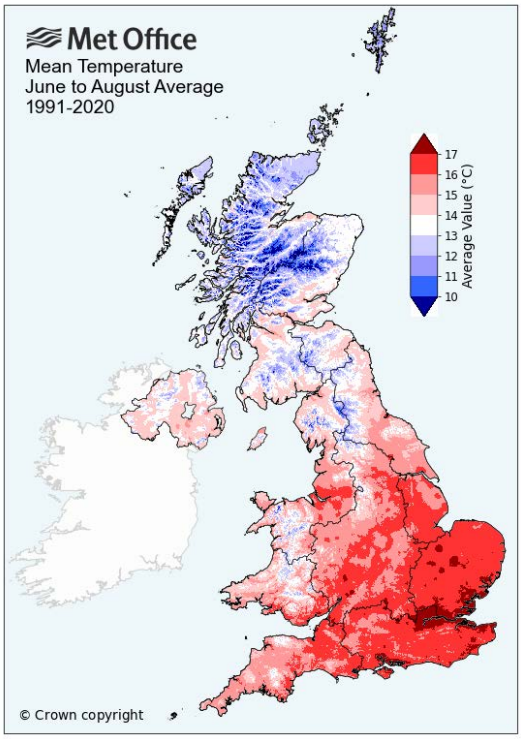
1-month precipitation Outlook compared to normal



Likelihood of wet and dry conditions are balanced

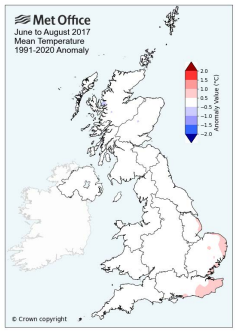
Long-term average temperatures (3-month)

This page shows the long-term average temperatures across the UK for the 3-month Outlook period. Long-term average temperatures for the 1-month period are on page 6. Long-term precipitation averages are shown on pages 7 (3-month) and 8 (1-month).

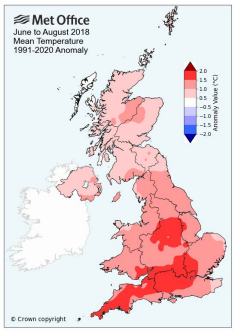


Average temperatures for June - August based on observations from past years.

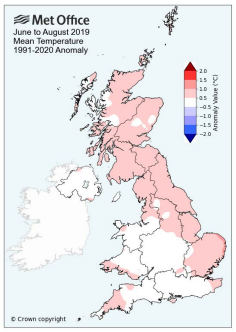
Last 5 years' temperatures, difference from average (3-month)



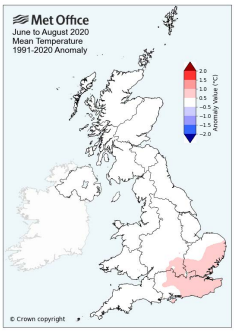
Jun-Aug 2017



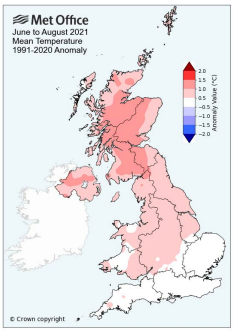
Jun-Aug 2018



Jun-Aug 2019



Jun-Aug 2020



Jun-Aug 2021

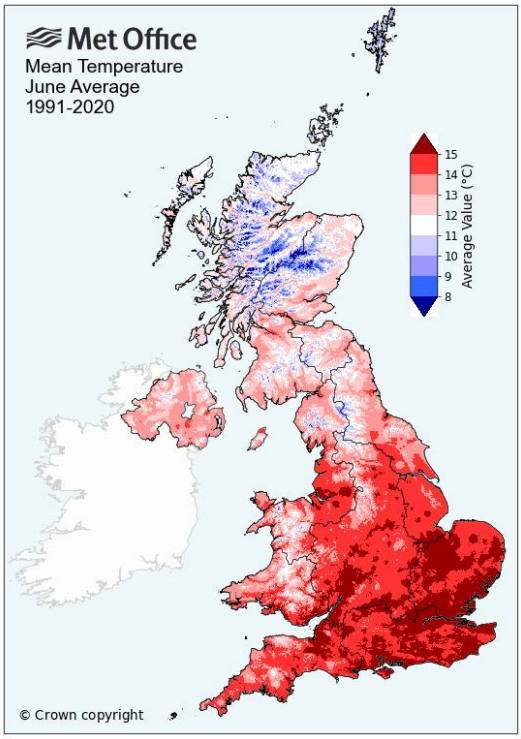
Anomaly (ºC)

< -2.0	-2.0 to -1.5	-1.5 to -1.0	-1.0 to -0.5	-0.5 to 0.5	0.5 to 1.0	1.0 to 1.5	1.5 to 2.0	> 2.0

These maps show how June - August temperatures in the last five years differed from the long-term average temperatures shown in the upper panel. Pink and red colours indicate warmer-than-average conditions while blue shades indicate cooler-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

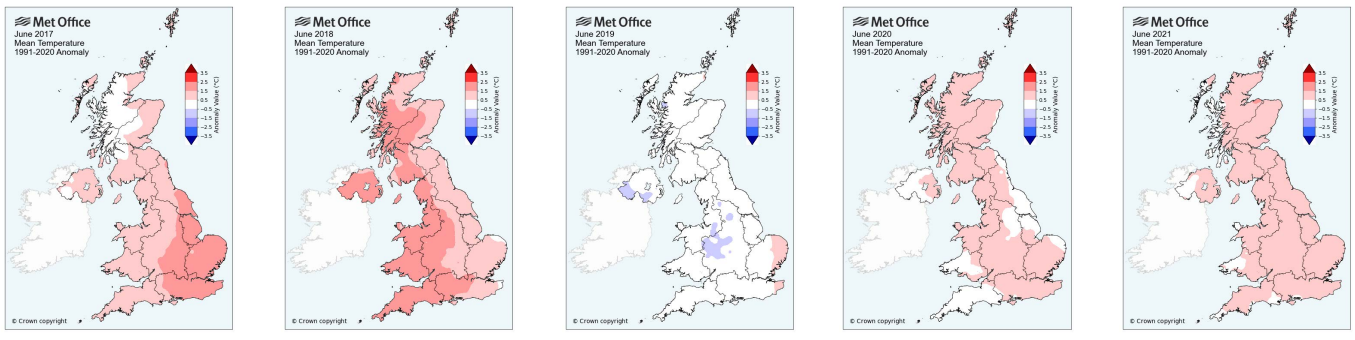
Long-term average temperatures (1-month)

This page shows the long-term average temperatures across the UK for the 1-month Outlook period.



Average temperatures for June based on observations from past years.

Last 5 years' temperatures, difference from average (1-month)



Jun 2017 | Jun 2018 | Jun 2019 | Jun 2020 | Jun 2021

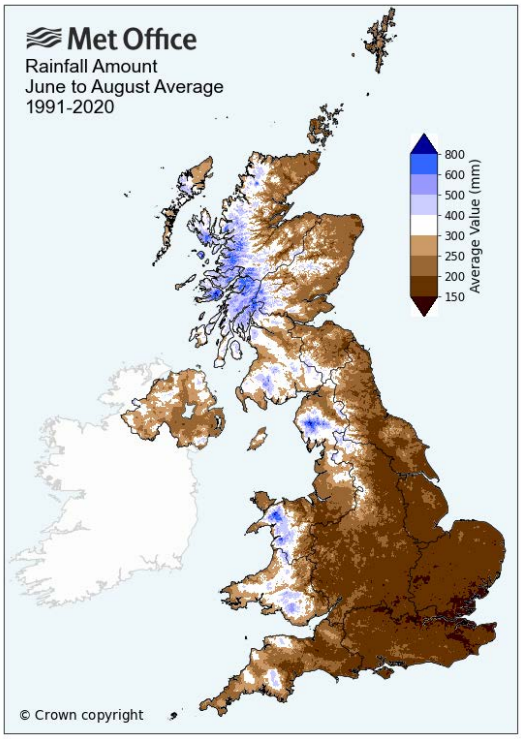
Anomaly (ºC)

< -3.5 | -3.5 to -2.5 | -2.5 to -1.5 | -1.5 to -0.5 | -0.5 to 0.5 | 0.5 to 1.5 | 1.5 to 2.5 | 2.5 to 3.5 | > 3.5

These maps show how June temperatures in the last five years differed from the long-term average temperatures shown in the upper panel. Pink and red colours indicate warmer-than-average conditions while blue shades indicate cooler-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

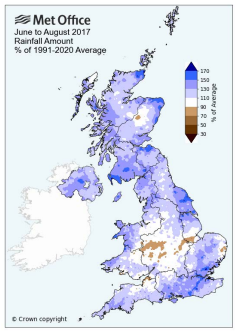
Long-term average precipitation (3-month)

This page shows the long-term average precipitation across the UK for the 3-month Outlook period.

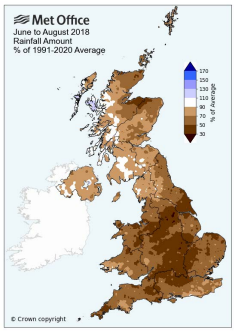


Average precipitation for June - August based on observations from past years.

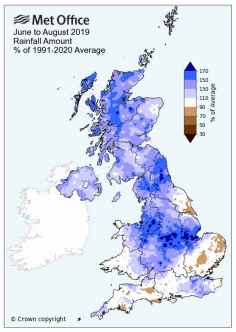
Last 5 years' precipitation, difference from average (3-month)



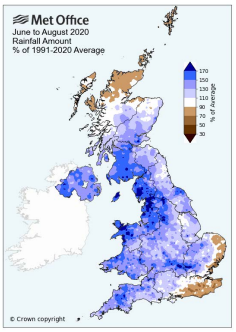
Jun-Aug 2017



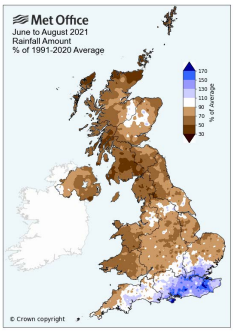
Jun-Aug 2018



Jun-Aug 2019



Jun-Aug 2020



Jun-Aug 2021

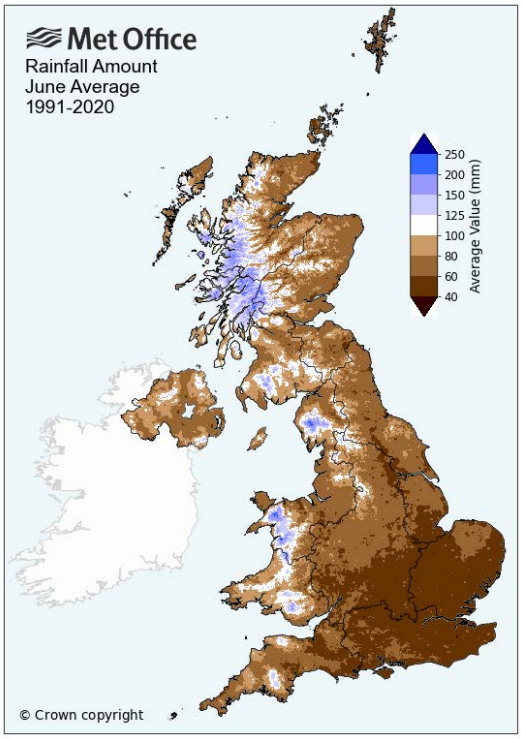
% of average

< 30 | 30 to 50 | 50 to 70 | 70 to 90 | 90 to 110 | 110 to 130 | 130 to 150 | 150 to 170 | > 170

These maps show how June - August precipitation in the last five years differed from the long-term average precipitation shown in the upper panel. Brown colours indicate drier-than-average conditions while blue shades indicate wetter-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

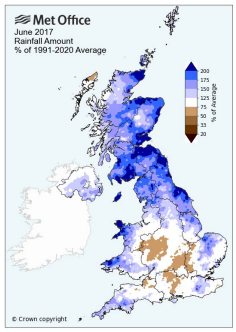
Long-term average precipitation (1-month)

This page shows the long-term average precipitation across the UK for the 1-month Outlook period.

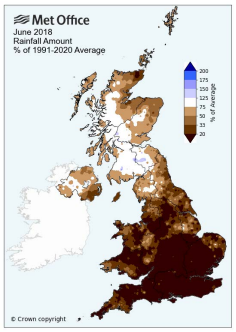


Average precipitation for June based on observations from past years.

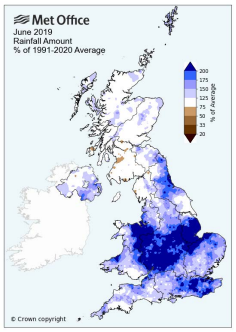
Last 5 years' precipitation, difference from average (1-month)



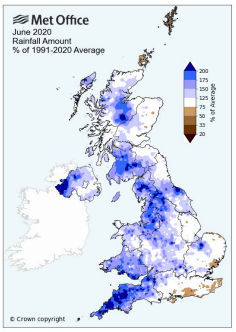
Jun 2017



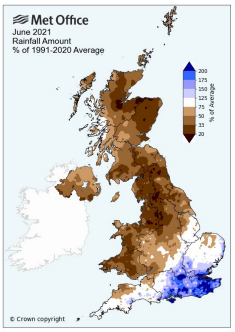
Jun 2018



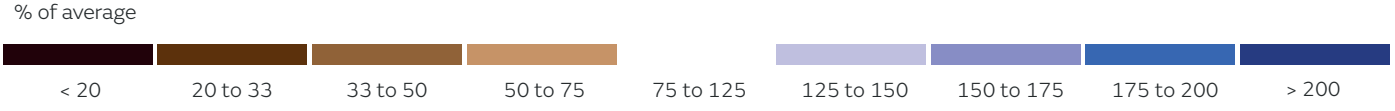
Jun 2019



Jun 2020



Jun 2021



These maps show how June precipitation in the last five years differed from the long-term average precipitation shown in the upper panel. Brown colours indicate drier-than-average conditions while blue shades indicate wetter-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

Q&A

Q. What is the point of the Outlook, who is it meant for?
A. This Outlook is produced for planners in government and business who make risk-based decisions. These users are aware of the complexities of this type of outlook and will include those factors in their decision-making process.

Q. How did you decide on the Outlook? What are the main factors affecting it?
A. It is based on information from observations, several numerical prediction systems and expert judgement. See the 'Outlook in Context' section of the Outlook for more details.

Q. Is the Outlook for the whole country?
A. The Outlook is for the average of conditions over the UK as a whole. Regional deviations from the UK average can occur. For example, average UK precipitation can result from below-average rainfall for the northwest and above-average for the southeast.

Q. How confident are you in this Outlook?
A. The percentages in the 'Likelihood of Impact' sections of the Outlook give the level of confidence.

Q. Does this Outlook mean this summer is going to be hot?
A. The Outlook suggests there is an increased chance of above-average temperatures, with impacts from heatwaves possible. However, the increased chance of hot conditions could just as easily reflect a mix of hot and cool days, warm nights, or less extreme levels of warmth rather than heatwave conditions specifically. Heatwaves do not typically persist throughout a whole three-month period and therefore the Outlook does not imply continuous heatwave conditions.

Q. Does this mean we are going to see more dry conditions and what are the associated impacts?
A. Although dry weather led to an increased wildfire risk at times during spring, rainfall is most likely to be normal during June. While for the summer as a whole, there is only a slight reduction in the chance of conditions being wet overall. You can check the Fire Severity Index for your area on the Met Office website. A mixture of wetter and drier spells are likely over the next 3 months, typical of a normal summer. During summer, thunderstorms are more prevalent and therefore impacts from heavy rainfall and lightning. Any more detailed questions about long-term hydrological prospects and impacts should be referred to UKCEH (http://www.hydoutuk.net/) or EA, SEPA, Natural Resources Wales or NI Direct.

About the Outlook

The Outlook presented here is for the United Kingdom as a whole and is based on information from observations, several numerical prediction systems and expert judgement. It is updated monthly to reflect the latest information on global weather patterns and their effect on the UK. The Outlook is designed to be used in conjunction with shorter-range forecasts – detailed weather forecast information is available on the Met Office website (https://www.metoffice.gov.uk).

Information for June will be superseded by the long-range information on the public weather forecast web page, starting from 1 June 2022.

In this product, temperature refers to the average of daytime maxima and night-time minima. All numerical values relate to averages (temperature) or totals (precipitation – rain, sleet, snow and hail) over 1 or 3 months, which are further averaged over the UK land area as a whole. Normal likelihood and long-term averages are established using the period 1991-2020.